

THE DAMS AND RECREATION

The adjunction of parks, campsites and other recreational facilities to essentially utilitarian dam and reservoir projects does not indicate a deviation from the basic Corps mission but rather an extension of it. It would be far simpler for engineers to concentrate on the functional aspects of their impounding systems than to complicate their plans with provisions for public use water-related recreation. Considerable versatility is required of a system proposing to satisfy the objectives of a multiple-purpose reservoir.¹ Impounding and releasing schedules for water supply and flood protection are variable because of seasonal (and adventitious) factors which regulate them. The fluctuation of pool levels is inevitable and possesses a special significance for a reservoir which is also recreation lake.

Multiple-purpose reservoir projects are not new; the increased emphasis on recreative use of public land is a product of growing concern for the steady absorption of natural open spaces by urban and industrial expansion and a resultant sense of urgency to preserve accessible green space. Adding such lands to those reserved for reservoir operation has peculiar merit: the regions are ideal both for natural preserve and recreational development; water-related recreational facilities are clearly available; and vast tracts of land may be acquired for public use, feasible only under a Federally-funded program.

Recreation features in the plans for all Reservoir projects comprising the Comprehensive Basin Plan of the Delaware River Watershed. Jadwin Dam is an exception; operational since 1959, it is intended solely for flood control and does not impound a pool. Prompton Dam on Lackawaxen River

above Honesdale was completed in July 1960; it was authorized under Public Law 858-80-2 of 1948 as a flood control structure. The Flood Control Act of 1962 authorized modifications which gave Prompton impoundment capability, with control tower and gates, an impervious lining in the upstream valley and a new spillway width of 250 feet, increased from its original 50-foot width. In its renewed version, Prompton became a recreation site with facilities for boating, swimming, fishing and picnicking; a change house, comfort station and 750-car parking lot were added near the dam. The authorization provided for acquisition of an additional 1,325 acres, extending the site up the Lackawaxen Valley five miles above the dam and more than doubling the recreational area. This relatively small facility, operated and maintained by the Pennsylvania Department of Environmental Resources, is likely to experience capacity patronage of 156,000 visitors annually within a decade.

Francis E. Walter Dam spans the Lehigh River a half mile below its confluence with Bear Creek. From there the Lehigh flows swiftly and tortuously for 75 miles to join the Delaware at Easton. Even before its completion and dedication in June 1961, the dam rendered valuable service in flood control. The lake behind the dam has been popular with anglers from the days of its initial impoundment; waters above and below the lake are annually stocked with rainbow and brown trout and indigenous small mouthed bass are usually found in abundance. The full development of Bear Creek State Park has awaited the further determination of the project's storage function; the Flood Control



General Edgar Jadwin Dam



Prompton Dam and Lake



Francis E. Walter Dam and Lake

Act of 1962 authorized enlargement of the dam and reservoir and expansion of the recreational features. In addition to its usual water-related features, there will be trails for nature study and hiking and hunting will be permitted in season according to State game laws. Overnight facilities will not be provided and motor boats will be excluded from the rather restricted lake area.

Beltzville Dam is the District's most recently completed flood control project. Constructed across Pohopoco Creek four miles west of its juncture with the Lehigh River, the rolled earth embankment holds back a lake five miles long with a capacity of 13 billion gallons. The flood storage potential of Beltzville is significant in a region characterized by flash floods; alleviation of the risk of flood damage is assured for towns on the Lehigh from Bowmanstown through Allentown and Bethlehem to Easton. Pine Run empties into Beltzville Lake about a mile above the dam; here, the Pine Run Cove recreation area offers wooded picnic groves, boating and swimming. hiking trails lead to the Overlook and Exhibit Center and to dig sites where relics of the Devonian Sea are exposed in fossiliferous outcroppings. Carbon

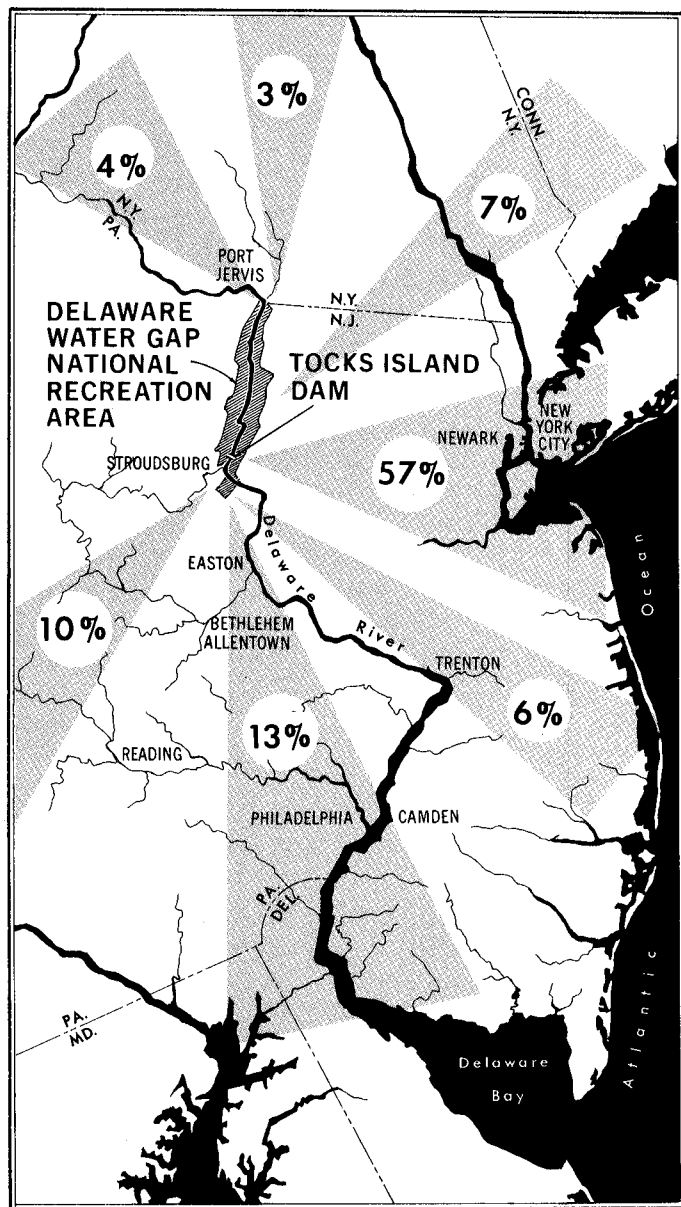
County's last covered bridge, salvaged from flooded Pohopoco Creek, will be retired from vehicular traffic duty in this scenic area. A mile farther up and across the lake is the site of Trinity Gorge recreation area, to be developed later for day use.

Up near the head of the lake and bisected by Wild Creek is the site of the proposed Twinflower area, to be developed for day and night use; plans call for installation of permanent campsites, boat launching ramps and fishing facilities. The combined recreational capacities of the three Beltzville areas is estimated at 635,000 visitors annually—a modest but valuable contribution to the tremendous recreational needs of an expanding Megalopolis.

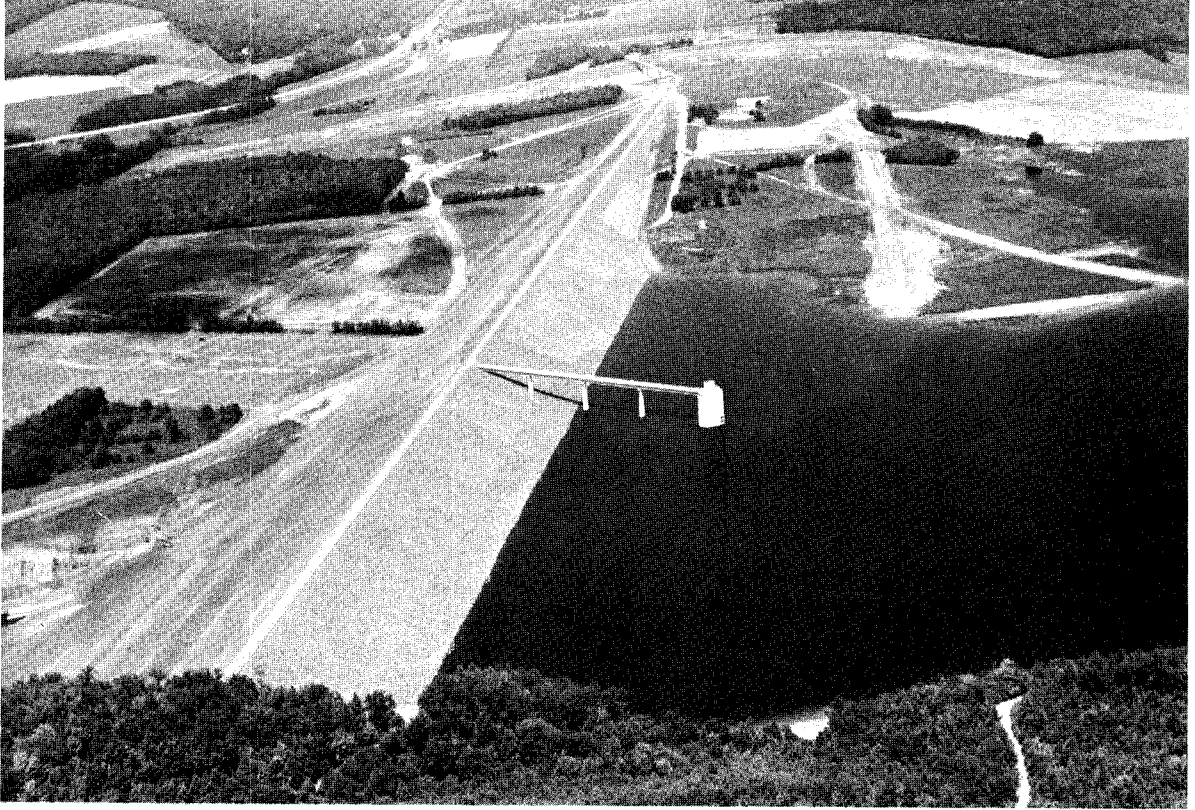
The vast recreational resources available to the Delaware Water Gap National Recreation Area (DWGNRA) offer the best prospect for solving the metropolitan region's recreation problems. DWGNRA is a redesignation of the project originally conceptualized as the Tocks Island National Recreation Area (TINRA). The National Park Service was given responsibility for planning, development and management of the project by Congressional authorization under Public Law 89-158, 89th

Congress, approved 1 September 1965. The motivating core of the concept was the projected 37-mile long Tocks Island Lake, its storage waters behind Tocks Island Dam to extend up the Delaware River Valley to Port Jervis, New York, through a region of spectacular scenic beauty. The dam-to-be remains the single main stem control structure envisioned in the Delaware Watershed Comprehensive Basin Plan and was authorized by the Flood Control Act of 1962. The Tocks Island complex of nearly 100,000 acres will seek to carry out the entire range of functions constituting the multiple-purpose water control program of the Corps of Engineers. Basic to the mission are the flood control and water supply functions of the potential 105 billion gallon impoundment. A proposed hydro-electric plant would have an average annual production capacity of 307 million kilowatt-hours and the possibility of an additional pumped storage facility to more than treble that output. The 100-mile lake shoreline will challenge Park Service planners to provide a dozen or more controlled areas with varied water access features. A prodigious variety of geographic features on both the New Jersey and Pennsylvania sides of the 72,000 acre park offer unlimited possibilities to the outdoor sportsman and an abundance of wildlife to enrapture the naturalist. Recreational development within DWGNRA's boundaries, including hunting in season, is expected to provide for the four-seasonal needs of ten million annual visitors.

Tocks Island Dam will be managed by the Corps of Engineers as a key unit in the basin system of water control installations, in coordination with National Park Service recreational facilities on or contiguous to the lake.



Approximate apportionment of visitor sources for Delaware Water Gap National Recreation Area. The proposed recreation preserve is expected to accommodate 10.5 million annual visitors.



Beltzville Dam and Lake

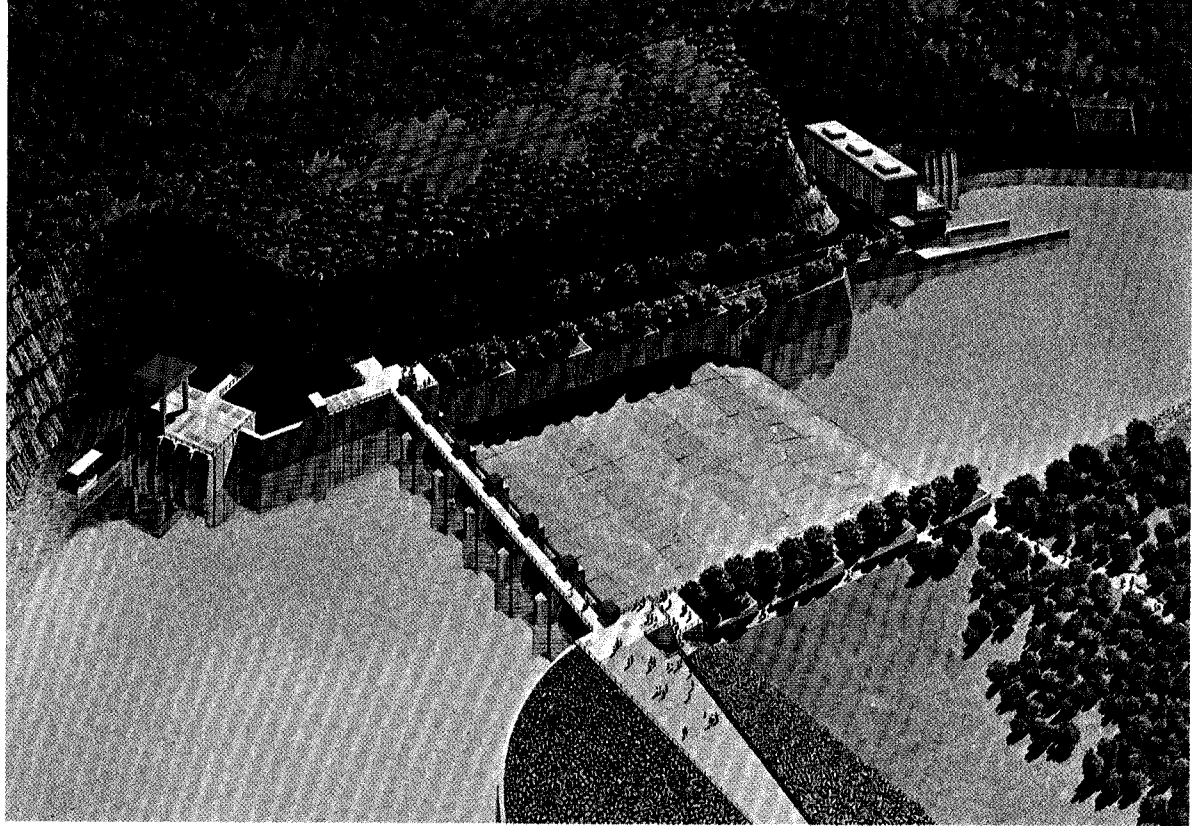
Water quality control and enhancement of the environment as a fish habitat are high in priority on the developmental agenda; rather than adopt the procedure usually mandated for National Parks: to preserve wholly the integrity of the natural scene an effort will be made to develop the area for "green land" recreation.

The Delaware Water Gap National Recreation Area is ideally located to serve the population of the Northeast Corridor. The map on page 217 shows a hypothetical visitor distribution for an estimated annual capacity of ten-and-a-half million pleasure-seekers. Planners feel that recreation facilities in the area are lagging far behind requirements, that even DWGNRA is too little—too late and will be over-exploited long before it will be serviceable. The site lies within 100 miles of 15 percent of the nation's population; this segment will exceed 47 million persons by the year 2010. Recreation sites planned in conjunction with dams of the Comprehensive Basin Plan (11 major projects; 8 secondary projects) loom importantly as potential oases for relief from encroaching urbanization.

Completion dates for Tocks Island Dam, variously announced from time to time, are in

suspense, pending determination of a number of questions concerning the impact of the project on the ecology and the human environment. Conservationists, critics of the project and perennial detractors of the Corps have generated a welter of issues aimed at Tocks Island as the focal point of a timely polemic. Out of the profusion of argument and criticism has emerged considerable material of positive value. The time of the conservationist has come and he will be heard. His theories and concepts are frequently incomplete or inconsistent, but his heart is pure. Though the immediate objectives and the methodologies of the Corps and its critics vary, their ultimate goals were identical: to seek the optimum means for survival.

Survival may seem an archaically basic goal to many accustomed to thinking of the present as complete, millennial and invulnerable; but the danger signs are there. Having come full cycle in the hour of technology, we may soon face the imperative of revising a hard-won and cherished life style to make it viable. The Corps with its long record of practical concern for the Nation's survival will likely be the most effective instrument for the practical actualization of the "new conserva-



Tocks Island Dam and Lake

tion.” According to General Richard H. Groves, Deputy Director of the Civil Works Division, Corps of Engineers:

“While the pressures which have developed cannot be ignored, they must be kept in perspective. The program keeps growing. The program is tied to people, and the people double every forty years . . . we build on the notion that people want an ever-increasing standard of living, and (that) is tied to water programs. If you conserve undeveloped areas, you’re not going to be able to do it. If you double the population and they double their standard of living, you have to keep going. It’s not as simple as the people who take an extreme view say.”

Conservation of wilderness areas and historic sites is crucial to the preservation of a national heritage but increasingly difficult to accomplish. In the densely populated District area with its rich historical background, the choice between preservation and economic development is made almost daily. Rural areas are no less affected. It has been said that the

most painful price paid for the benefits derived from reservoirs is the sacrifice of valuable land. Another less tangible toll is levied by the disruption of life in the valleys where the new lake waters collect. The loss of home and familiar surroundings are most poignantly felt by the aged and by residents deeply rooted in the area. The value of a heritage lost, of the immersion of the unique essence of the past is not assessable and cannot be computed in the property settlement. While Corps negotiators (who are people after all, and not compulsive dam-builders) make every effort to obtain equitable reimbursement for displaced property owners, these are still agonizing decisions for all concerned. For some, it is the end of a cherished way of life; yet for others it is an opportunity to liquidate an encumbering past, to relocate and start afresh in newer, more stimulating surroundings.

The fresh-water lakes stored behind the dams and their vast adjacent land tracts spearhead a national effort to preserve our natural heritage. Work programs must keep pace with debates, so that essential water control measures are provided and our arguments are not concluded by inundations.